

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 076518/0141	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/IB 01/ 00833	International filing date (day/month/year) 29/03/2001	(Earliest) Priority Date (day/month/year) 29/03/2000
Applicant CENTER FOR THE APPLICATION OF MOLECULAR BIOLOGY...		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. **Certain claims were found unsearchable (See Box I).**

3. **Unity of invention is lacking (see Box II).**

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

1

None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 01/00833A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, MEDLINE, EMBASE, SCISEARCH, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category ^o	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y ✓	EP 0 967 291 A (UNIV LELAND STANFORD JUNIOR) 29 December 1999 (1999-12-29) page 3, line 51 -page 7, line 48; claims 1-11 —	1-35
X ✓	WO 98 30721 A (PIONEER HI BRED INT ;BIRO RONALD L (US); FEAZEL RHONDA (US); HELEN) 16 July 1998 (1998-07-16) page 26, line 3 -page 27; claims 1-14 —	36-38
Y	—	1-35

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

- *&* document member of the same patent family

Date of the actual completion of the international search

30 May 2002

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10/06/2002

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Gabriels, J

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 01/00833

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	BEHR M A ET AL: "Comparative genomics of BCG vaccines by whole-genome DNA microarray." SCIENCE (WASHINGTON D C), vol. 284, no. 5419, 28 May 1999 (1999-05-28), pages 1520-1523, XP002200574 ISSN: 0036-8075 the whole document ---	1-35
A	GINGERAS THOMAS R ET AL: "Simultaneous genotyping and species identification using hybridization pattern recognition analysis of generic <i>Mycobacterium</i> DNA arrays." GENOME RESEARCH, vol. 8, no. 5, May 1998 (1998-05), pages 435-448, XP002156298 ISSN: 1088-9051 page 440 -page 442; tables 1-3 ---	1-35

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 01/00833

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP 0967291	A 29-12-1999	EP 0967291 A1 JP 2000041687 A		29-12-1999 15-02-2000
WO 9830721	A 16-07-1998	AU 6024598 A US 6100030 A WO 9830721 A1		03-08-1998 08-08-2000 16-07-1998

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US97/11457

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G01P 9/00

US CL : 73/504.05

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 73/504.05, 504.07, 504.17, 514.03, 514.08, 514.09

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,176,030 A (LAUGHLIN) 05 January 1993, entire document.	1-14
A	US 5,067,351 A (LAUGHLIN) 26 November 1991, entire document.	1-14
A	US 4,718,276 A (LAUGHLIN) 12 January 1988, entire document.	1-14

 Further documents are listed in the continuation of Box C. See patent family annex.

-	Special categories of cited documents:	
"A"	document defining the general state of the art which is not considered to be of particular relevance	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"B"	earlier document published on or after the international filing date	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	*Z* document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	

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02 OCTOBER 1997

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/21193

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 G01N33/50 G01N21/62 G01N21/77 G01N21/64

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 94 12863 A (TUFTS COLLEGE) 9 June 1994 see the whole document	1-42
A	US 4 499 052 A (FULWYLER MACK J) 12 February 1985 see the whole document	1,11,14, 16,33, 36,39,41
A	WO 97 12030 A (NANOGEN, INC.) 3 April 1997 see page 17, line 33 - page 53, line 26; figures	1,11,14, 16,33, 36,39,41
A	GB 2 294 319 A (CAMBRIDGE IMAGING LTD) 24 April 1996 see the whole document	1,11,14, 16,33, 36,39,41
		-/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International Application No

CT/US 98/21193

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 723 146 A (STANFORD RES INST INT) 24 July 1996 see page 7, line 8 - page 31, line 44; figures ----	1,11,14, 16,33, 36,39,41
A	US 5 244 636 A (WALT ET AL.) 14 September 1993 see column 8, line 12 - column 31, line 30; figures ----	1,11,14, 16,33, 36,39,41
A	US 5 028 545 A (SOINI ERKKI J) 2 July 1991 see the whole document ----	1,11,14, 16,33, 36,39,41
A	US 4 822 746 A (WALT DAVID R) 18 April 1989 see column 5, line 32 - column 188, line 61; figures ----	1,11,14, 16,33, 36,39,41
A	US 5 308 771 A (ZHOU QUAN ET AL) 3 May 1994 see column 5, line 35 - column 9, line 29; figures ----	1,11,14, 16,33, 36,39,41

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/21193

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 9412863	A	09-06-1994	US 5320814 A CA 2128413 A EP 0627074 A JP 7509784 T	14-06-1994 09-06-1994 07-12-1994 26-10-1995
US 4499052	A	12-02-1985	DE 3331017 A FR 2532431 A GB 2126341 A, B JP 1772176 C JP 4047265 B JP 59060261 A US 4717655 A	08-03-1984 02-03-1984 21-03-1984 14-07-1993 03-08-1992 06-04-1984 05-01-1988
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US 5308771	A	03-05-1994	NONE	

INTERNATIONAL SEARCH REPORT

Internal Application No
PCT/US 96/15670A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C09K3/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 C09K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE WPI Week 7912 Derwent Publications Ltd., London, GB; AN 79-23144b XP002023074 & JP,A,54 020 979 (LION FAT) , 16 February 1979 see abstract</p> <p>---</p> <p>EP,A,0 052 427 (IMPERIAL CHEMICAL INDUSTRIES) 26 May 1982 see abstract; claims 1,2,12</p> <p>---</p> <p>---</p>	1-9,17, 19,21,22
Y		1-9,17, 19,21,22

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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- 'A' document defining the general state of the art which is not considered to be of particular relevance
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- '&' document member of the same patent family

1

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20 January 1997

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- 7. 02. 97

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Nicolas, H

INTERNATIONAL SEARCH REPORT

Internal Application No

PCT/US 96/15670

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>DATABASE WPI Week 8717 Derwent Publications Ltd., London, GB; AN 87-119233 XP002023075 & JP,A,62 062 884 (TAKEMOTO) , 19 March 1987 see abstract</p> <p>---</p>	1-9,17, 19,21,22
A	<p>DATABASE WPI Week 8717 Derwent Publications Ltd., London, GB; AN 87120103 XP002023076 & JP,A,62 064 882 (TAKEMOTO) , 23 March 1987 see abstract</p> <p>---</p>	1-9,17, 19,21,22
A	<p>EP,A,0 149 182 (RÖHM) 24 July 1985</p> <p>see abstract; claims 1,6</p> <p>-----</p>	1-9,17, 19,21,22

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 96/15670

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP-A-52427	26-05-82	AT-T-	10945	15-01-85
		AU-B-	544204	23-05-85
		AU-A-	7714281	20-05-82
		CA-A-	1181888	29-01-85
		JP-C-	1639262	18-02-92
		JP-B-	2061500	20-12-90
		JP-A-	57145128	08-09-82
		US-A-	4409285	11-10-83
EP-A-149182	24-07-85	DE-A-	3400079	11-07-85
		DK-B-	169350	10-10-94
		JP-C-	1755807	23-04-93
		JP-B-	4042984	15-07-92
		JP-A-	60159053	20-08-85
		US-A-	4576864	18-03-86